

# **OPERATION PROGRAM FOR 2000**

## **OF THE ENERGY REGULATORY COMMISSION OF THE REPUBLIC OF ARMENIA**

(Approved by Resolution 27.1, dated 28 September, 1999)

The Energy Regulatory Commission of the Republic of Armenia is a regulatory body in the energy sector, which is acting pursuant to the RoA Energy Law, other normative acts, and is independent within the scope of its authority.

The Chairman, Deputy Chairman, and three Commissioners of the Energy Regulatory Commission are assigned by the President of the Republic of Armenia.

The main objectives and authorities of the ERC are stated in the RoA Energy Law.

The ERC conducts its activities with the help of the staff (42 persons), the structure of which is shown below:

- Department of Tariff Policy
- Department of Financial and Economic Analysis
- Legal-Licensing Department
- Administration Department
- Secretariat

### **1. Problems of State Regulation in the RoA Energy Sector**

The RoA Energy Law separates the functions of state policy development, economic activities and regulation in the energy sector. The authorities of the ERC as a regulatory body can be presented in the following groups of functions:

- a) setting tariffs (review), forecasting short- and long-term tariff changes;
- b) setting quotas for electricity provision (generation), import and export;
- c) proceduralization of contractual relations of economic entities of the sector, discussion of disputes;
- d) proceduralization of customer – economic entity (contractual or legal-normative) relations.

Given the efficient implementation of the above functions, state regulatory body of the energy sector (the Energy Regulatory Commission of the Republic of Armenia) is outside of the structures of government legislative and executive bodies and is independent within the authorities bestowed upon by the RoA Energy Law. This status gives an opportunity to balance the somewhat opposite needs of customers and economic entities, and be guided by economic logic while setting tariffs.

At the same time it is obvious that effective implementation of the most important functions of the ERC is possible only in close collaboration with certain government branches, NGOs and representatives of different groups of customers.

But the above collaboration is sometimes misunderstood and misinterpreted. In particular, some coherent steps taken by the ERC in collaboration with government executive bodies are sometimes interpreted as fulfillment of the “will” of the Government of the Republic of Armenia. It is obvious, though, that in order to efficiently fulfill their functions both the GoA as the developer and implementer of the State Policy in energy sector, and the ERC, as a regulatory body in energy sector, should collaborate closely. This also relates to the development of strategic and tactical projects, as well as resolution of different current problems.

The problems of the ERC – GoA collaboration, customer protection, and improvement of methods and mechanisms of customer service become more important in the light of organizational and structural changes in energy sector.

Doubtless, strategic and tactical projects for the development of energy sector (including investment, loan, and privatization projects, and development and signing of model contracts) are under authorization of the GoA. But, on the other hand, resolutions issued by the GoA on the above issues directly influence and predetermine the tariff policy, because while calculating and setting the tariffs the expenses projected by investment and loan projects are being taken into consideration. So, it is very important that the ERC has an active participation in the discussions and negotiations over investment, loan, and privatization projects from the very beginning. This will give an opportunity to evaluate social outcomes and effects of the above projects on the tariffs at the project development stage. So, as a result of collaboration, both the ERC and the GoA will be able to issue reasonable and agreed upon resolutions, thus preventing the public from social tension.

It is clear that the ERC needs corresponding financial and human resources for appropriate resolution of the problems it faces. Given the above, the transition to non-budget funding of the ERC’s activities will be the best step.

Taking into consideration the experience of some of the countries, and with the purpose of ensuring the financial independence of the ERC and to unburden the State budget, we find it appropriate to develop financial assets necessary for the efficient operation of the ERC based on contributions of the economic entities of energy sector in compliance with the defined procedures. It should be mentioned, though, that given the existing amount of budget funding of the ERC and, moreover, the real allocations and forecast for future increase of these allocations, small contributions from the economic entities will affect neither the operation of the entity nor the existing tariffs.

In the event of having the necessary funding, independent experts (famous scientists, professionals and professional organizations) will be involved in the ERC's activities. This will increase the trust of the public in the reasonableness of resolutions issued by the ERC; will form separate professional branches based on new problems raised (financial auditing, and public communication branches in particular); there also will be ERC regional representations open in Marzes (regions), which will resolve the problems on sites.

Of course the proposed option of the ERC funding requires corresponding changes in the RoA Energy Law. Generally, the issue of changes in the RoA Energy Law has now become relevant, because of projected organizational and structural changes and those that have already taken place in the whole economic system and in energy sector in particular.

Soon the ERC will have to pay serious attention to the issue of creating an institution of public consent. The latter presumes active communication with NGOs, mass media and different groups of customers. It is true that today the ERC activities and sessions are open for public, but that is not enough. The ERC itself should be the initiator of wide public discussions of any issue, which can have a social outcome, and issue a corresponding resolution taking into consideration the public opinion.

To extend and improve public relation activities the ERC must have all the necessary technical means and appropriate conditions for work. Now the spacing problems the ERC is facing prevent the Commission from proper organization of the above works.

Together with extension of privatization process in energy sector, the opportunities for state bodies to influence economic activities of privatized entities will become more limited. In this situation the role of the ERC, which is authorized by law to regulate and supervise activities of the economic entities by means of tariffs for services, license provisions, financial and economic reports, etc, regardless of type of ownership, becomes more important.

The on-going organizational and structural reforms in energy sector are aimed at developing an efficient, competitive, and reliable energy market, taking into consideration monopolistic status of separate segments of the system. The process of separation of energy sector segments of generation, transmission, distribution and Central Dispatch Service, which created favorable prerequisites for management of the financial flows of the system, and forming market structures and mechanisms, is now finished.

But some of the principles of creation of the energy sector market need to be discussed and adjusted. The first is creation of efficient market structures: clear determination and separation of their functions, and proceduralization of their relations taking into consideration the fact that the central dispatch, regulation of financial flows, and other

functions are implemented by means of the above structures. The second is implementation of the unified technical and technological policy ensuring reliability, safety and stability of the system.

Based on the principle of economic independence of the economic entities of energy sector bestowed upon them by the RoA Law, and without jeopardizing safety and reliability of the system, it is necessary to review and classify the norms and standards, which are characteristic for the old system and acting in the existing system.

Given the above, we should clearly define those technical and technical-economical norms and standards (imperative norms), the implementation of which is obligatory to all Power Market Members, as well as other regulated economic entities of the sector. The above norms and standards should, in fact, have a status of Government legal norms and RoA ERC normative acts. Such a separation means that all the other technical and economical requirements and rules related to safety and reliability of energy sector can be defined by mutual agreement of the economic entities-power market participants (in compliance with procedures defined in the Charters of their different unions) and stated in the provisions of operation license. Thus, only the members of the unity (union) are obligated to ensure the implementation of the above requirements.

Representatives of International consulting companies have developed and presented for discussions of the RoA Ministry of Energy and Energy Regulatory Commission specific proposals on creation of power market structures, as well as on issues of ensuring safety and reliability of energy sector. Now based on these proposals a package of legal normative acts necessary for development of the Armenian Power Market is being worked on with consideration of legislative, economic, and regional specifications of the Republic of Armenia.

## **2. Tariff Policies**

The objective of the tariff policies is to develop, define and employ economically justified and socially acceptable pricing mechanisms.

Activities of the ERC are aimed at modernization of energy sector through distinct tariff policies and provision of guarantees for native and foreign investments in construction of new generation capacities, as well as the most efficient use of local energy resources by.

The strategy of tariff policy improvement is based on the following principles:

- Full reflection of generation, transmission and distribution costs (including O&M) in the tariff, provision of Rate of Return;
- Classification of customers in groups and establishment of identical tariffs for customers of the same group;
- Further reduction of cross subsidies between customer groups.

The ERC is progressing with the operations aimed at the advancement of methodologies for tariff calculations and their adjustment with internationally accepted standards. Activities targeted at the evaluation and clarification of the data that lie in the basis of tariff calculations are also in progress.

The advancement of tariff calculation methodologies shall lead to the development of principles for the establishment of the size of depreciation deductions, taking into consideration the process of revaluation of fixed assets in the sector, the imperative need for investments in the sector and principles for determination of the Rate of Return (RR).

In order to level the load curve of the generators and elevate the efficiency of utilization of existing capacities, the ERC has adjusted the generation quotas for 1999. In the result of that discount night time tariffs have been set for all the categories of customers. The employment of night time tariffs shall enhance the development of economy and of small/medium business in the first place. It will also resolve certain major social problems. Meanwhile, some technical solutions required for the employment of the night time tariffs, particularly installation of new meters, will have a significant positive impact on the efficiency of the entire system, including the elimination of overlosses.

The new methodologies of tariff calculation for electricity generated by small HPPs has been developed and is in the phase of testing. It will be employed from January 1, 2000.

Presently, the Armenian customer pays only for the quantity of the consumed electricity, regardless of the used capacity (single tariff system). That means that the fixed costs

spent for the providing the capacity of the system are proportionally allocated among all types of customers, therefore small capacity customers (or groups of such customers) are partly compensating the fixed costs for capacity needs of major capacity customers (or groups of such customers).

In order to resolve the above issue the ERC continues the operations aimed at the employment of the two-part tariff (capacity and energy).

The development of basic methodologies for the two-part tariff is scheduled for 2000, to ensure the employment of the two-part tariff depending on the technical ability.

Employment of the two-part tariff will enable to carry out the following:

- Level the load curve of the system;
- Create competition for electricity delivery on the wholesale market;
- Enhance efficient use of electricity and capacity by major consumers;
- Enhance the process of employment of energy efficiency mechanisms.

## *2.1. Electricity, Thermal Energy and Natural Gas Balances*

The balance forecast for electricity in 2000 (Table 1) is based on the following approaches:

- Maximum use of electricity generated by HPPs;
- Provision of load similar or identical with the installed capacity of the Armenian Nuclear Power Plant (ANPP) to ensure its safe operation and reduction of costs;
- Evaluation of the projected impact of night time tariff (applied for residential customers) on operation modes of the generators.

The balance forecast for thermal power in 2000 (table 2) has been carried out on the basis of the Bids/Applications submitted by economic entities.

The ERC is forecasting a definite increase in the import and consumption of natural gas in 2000 (Table 3), stipulated by the increase of natural gas consumption in nearly all the sectors of economy. According to preliminary estimates, the natural gas supply will be restored in nearly 27 thousand households in 2000. In the result of the improvement of the metering system we are anticipating significant reduction of technical losses in natural sector, as compared to the data of 1999.

## 2.2. *Tariff Forecast*

One of the major tasks of the ERC is justified long-term and short-term tariff forecast for the energy sector. This aspect is of critical importance for the development, refurbishment of economic entities operating in the sector of energy and other areas, as well as for the evaluation and analysis of new investment projects, for the development of long-term budget programs by the government.

The dynamics of the tariff changes depends upon the economy of the country (including the energy sector), the pace of the investment projects, inflation rate, exchange rate of the Armenian Dram and other factors. Today it would be difficult to appraise the above processes and make precise forecasts.

The final judgement of the ERC on the 2000 tariffs will be made on the background of the existing constraints (ensuring safe and reliable operation of the system, leveling of load curve, preservation of the level of Lake Sevan, etc.), and after the completion of the formation process of generation structure (by the end of November), which will guarantee the minimum average weighted tariff. The above operations will be targeted at the exploration and identification of realistic opportunities enabling the sustentation of electricity tariffs through 2000, with consideration of the inflation forecasts and the exchange rates of the Armenian Dram.

The tariffs for natural gas shall remain unchanged throughout 2000.

There is no doubt that the energy sector will need significant investments in the near future which will inevitably lead to certain tariff increase. Investment policies in the sector, including the privatization projects of the Armenian Government (sale prices, the volume of future investments, timetables and conditions) may most probably determine the future tariffs. Therefore, the Commission must take active part in the development of terms and conditions of privatization, the process of the tenders and evaluation of results.

According to preliminary estimates, the real tariff increase in the energy sector may come up to 50%, taking into account the volume of predictable investments in the sector within the coming 10 years.



### **3. Licensing and Monitoring of License Conditions**

#### **3.1. Licensing**

By 1 July, 1999, 36 economic entities of the energy sector had submitted corresponding Applications for Licenses and acquired Licenses from the Energy Regulatory Commission, pursuant to Article 48 of the Energy Law of the Republic of Armenia.

In the course of the licensing process it was discovered that the economic entities operating in the of thermal sector cannot submit their Applications for Licenses for a series of objective reasons. Having reviewed the problem and taking into consideration the necessity of thermal energy supply during the winter season and the crucial importance of the thermal sector development, the Energy Commission has forwarded for the review of the Armenian Government the Draft Law of the Republic of Armenia “On Introducing Amendments and Supplements in the Energy Law of the Republic of Armenia”, recommending that the licensing period for the thermal sector economic entities be extended until 1 July, 2000.

Having analyzed the operation indicators of the economic entities and taking into consideration the quality of service, the ERC started work on the introduction of amendments and supplements in the issued Licenses. The process of licensing and observation of License provisions is critical because the energy sector licensees have to conduct their operation in the environment of monopolized market, and some of the economic entities like distribution companies are natural monopolies. In such circumstances the most powerful government lever for the protection of the state and public interests are the Operation Licenses issued by the Energy Regulatory Commission of the Republic of Armenia, along with the control over the observation of License provisions. In order to enhance the above activities, increase the responsibility of economic entities and to regulate the entire process, in 2000 the ERC shall prepare and forward for the review of the Armenian Government the Draft Law of the Republic of Armenia “On the Penalties Imposed by the Energy Commission Pursuant to Article 27 of the Energy Law of the Republic of Armenia”.

The Commission must take active part in the process of works aimed at the introduction of amendments and supplements in the RoA laws and legal acts pertaining to the Licenses and operating conditions of the energy sector economic entities. This will include the process of privatization and the terms of operation following privatization. The legal norms and standards also need improving through the regulation of the monitoring process over the observation of the License provisions established by the ERC.

The Energy Commission attaches significant importance to the transparency and mutual trust in the relationships between the Energy Sector and the Consumer, and informing the customers about the situation in the sector and development projects.

### 3.2. *Financial and Economic Analysis*

The Energy Commission carries on with the process of financial and economic analysis of the operation of economic entities, based on the financial reports and financial-economic information received from such entities.

The financial and economic analysis of the energy sector operation enables the Commission to use the information contained in the forwarded reports to make assessments as to whether the effective tariffs cover the operation costs, whether the profitability of the invested resources is sufficient, and whether the efficiency of the Licensed Operation is high enough.

In order to create the necessary accounting data base, the ERC continues to work on the employment of the system of internationally accepted financial reports and forms of financial-economic information.

The ERC continues to work on the improvement of the classification and allocation principles of the costs included in tariffs, classification of energy sector customers in groups, upgrading of the forms of non-confidential financial reports on the operation of the Licensees.

One of the priority tasks is the creation of a uniform base for the employment of new tariff calculation methodologies, determination of tariff calculation base, computation of fixed and variable costs, customer costs, and losses.

The following activities shall be carried out with the involvement of independent experts:

- development and employment of a system for the analysis of the accounting balance of the energy sector enterprises, in compliance with the accounting standards of the Republic of Armenia; securing the process of employment of new tariff calculation methodologies and the two-part tariff;
- improvement of the forms of financial reports and financial-economic information filed with the Commission, in conformance with the requirements of the international standards, and linking them with the system of analysis;
- development of a system for the analysis of the financial and economic operation of the energy sector companies;
- development of indicators for the basic analysis of financial reports and economic information.

#### **4. Customer Operations**

In parallel with the formation of legal norms and standards, the ERC is gradually stimulating the operations focused on the protection of the customers' interests in the form of day-to-day meetings with concrete people, hearings and discussions which are rather time-consuming, given the fact that the number of complaints and inquiries from the consumers has significantly increased associated with the growing reputation of the ERC as a candid and unprejudiced entity.

Since 1 October, 1998 to date the ERC has received more than 140 petitions, inquiries and complaints in writing, 45% of which are from legal entities and 55 % from residential customers. Within its jurisdiction, the Commission has organized discussions and has resolved the problems, notifying the petitioners in writing. The number of inquiries and complaints from the customers in the above period is twice as much as the same number in the previous year. In our perspective, this process is rather stable and has a tendency for growth. This statement is based on the analysis of similar activities conducted by the regulatory bodies in foreign countries. It should also be mentioned that 90 % of the inquiries and claims were from the customers of the Yerevan area. We believe that this phenomenon has a number of objective and subjective causes, in particular, the consumers of the regional areas are facing more constraints and obstacles in referring their inquiries and protests to the Commission because of the communication and postal service tariffs.

The ERC is planning to establish direct communication with the regional areas of the Republic. In order to provide adequate resolution to the customers' complaints in shortest possible time periods, the Commission has established close collaboration with distribution companies, corresponding Ministries and departments. In case of necessity, the Commission's staff members conduct on-site research. According to the results of the analysis, the greater majority of complaints refers to the sector of electricity. The number of complaints dealing with natural gas sector is insignificant, since the gas supply system is in the stage of rehabilitation and the number of gas customer is relatively low.

In order to improve the knowledge of consumers in legal and safety issues and get them familiar with their rights and responsibilities, the ERC deems it necessary to carry out certain activities in that particular field during 2000 and beyond. If there are financial resources available, the ERC intends to organize such activities through the mass media by ordering the publication of specific materials. The significance of such activities in the country today is even more important than rehabilitation of gas supply.

## **5. Energy Market and Agreements**

The Energy Commission considers the development of market relationships in the energy sector a task of top priority, pursuant to the Energy Law of the Republic of Armenia. For the successful accomplishment of this task it would be necessary to establish and regulate discrete contractual relationships in the sector, clearly defining the rights, responsibilities and obligations of various parties.

The analysis of the Power Purchase Agreements with customers indicates that such agreements are rather sustainable and can balance the interests of all parties. However, for certain objective reasons, the ERC has not approved the model contracts for intra-system operations in the sector of electricity. One of the primary reasons for that is the incompleteness of the organizational and structural reformatations within the system. The ERC is planning to fill in that gap in the near future by procedurizing the contractual relationships in all links from generator to distributor, which, in its turn, will lead to the improvement of the safety and reliability of power supply at justified tariffs.

Direction of the market development and the structure of market are principal tasks today. Taking into account the major tasks of the government policies, the ERC will publish its platform on the orientation of market development and the structure of market.

During 2000 the ERC will focus on the enforcement mechanisms of the License provisions, import of natural gas and export of electricity, which would need a well-formed legal norms and standards, specifically:

- well-defined procedures and terms for the import/export of natural gas and electricity;
- well-defined procedures for public tender for the import/export of natural gas and electricity.

In the previous period the ERC participated in the development of a number of laws and legal documents. The process will continue in 2000. In particular, it would be necessary to review the rules for the use of electricity, natural gas and thermal power. It would also be necessary to clearly distinguish the tasks under the ERC's jurisdiction, delegated to that regulatory body by the Energy Law of the Republic of Armenia. The ERC is presently preparing the Draft of the Law of the Republic of Armenia "On Introducing Amendments and Supplements in the Energy Law of the Republic of Armenia", which will be offered for public discussion in the near future.

The ERC is also engaged in the process of tariff setting in integral packages to be used in future, relying on the forecast energy balance, the consumption and export volumes, the projected cash flows of the economic entities.

The ERC will continue the operations aimed at the employment of insurance system in the energy sector and creation of the legal norms for that.

## **6. Cooperation**

The ERC is currently exploring possible variations in the development of energy market with consideration of the experience of foreign countries and cooperating with various organizations. In particular, under the sponsorship of the USAID and NARUC the Commission participates in the periodic sessions of the regulatory commissions of the CIS and Eastern European countries.

Upon the initiative of the ERC and funded by the USAID, in October, 1999 the City of Yerevan will host the periodic conference of regulatory commissions with participation of the representatives of around 20 countries of Eastern and Central Europe and CIS. The conference will discuss issues related to tariffs and observation of license provisions, cooperation of regulatory bodies. The further progress of such activities is important in terms of studying the regulatory experience of other countries and exchange of diverse information.

The ERC is in close working relationships with the Regulatory Commission of the State of Kentucky and the U.S. Energy Association in terms of training and exchange of information. Within the scope of such cooperation, several delegations from the Kentucky Regulatory Commission and invited experts have visited Armenia.

The ERC is constantly being assisted by Hagler Bailly, an American Consulting Company.